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ABSTRACT

Cross-cultural surveys of 6th grade children in 12 countries presented them with six hypothetical situations in which friends had committed minor violations of adult norms (stealing, cheating on a test, breaking a window, and mischievous pranks). They were asked if they would inform in response to an adult who asks for the names of those involved. Summarizing 22 surveys revealed that within cultures the disposition to inform was stronger in rural than in urban children and in girls than boys. Analysis of two surveys in Israel and West Germany showed: (1) informing generally more likely when demanded by school authorities after school-related mischief than when demanded by an unspecified adult who was the victim of the mischief; (2) German children more disposed to inform than the Israelis (although both samples were very unlikely to inform and were the two least likely of the 12 countries studied); (3) the relation of informing to family authority structure was similar for the same sex across culture, especially for girls, but unrelated across sex within culture; and (4) combining cultures, informing in boys was more likely for those who described their family as intermediate in the degree of parental decision-making differentiation than for those from either undifferentiated or highly differentiated families, but was unrelated to whether father or mother made most of the decisions. (Author)

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# Family Authority Structures and the Disposition to Inform on Peers among Urban Children in West Germany and Israel[1]

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## Introduction

The question of whether and when an individual should or will inform authority about the actions of others can arouse very strong feelings. Little is known of this disposition except what can be deduced from the general framework of research on conformity. This investigation focuses on some familial antecedents of children's expressed intent to inform or not inform on peers who have hypothetically been involved in several kinds of mischief violating adult norms.

Informing is a triadic, asymmetric, complementary, or non-reciprocal relationship. The three parties are, of course, an actor, a communicator, and an audience. The communicator relates to the audience an account of the past behavior of the actor. To this extent informing is indistinguishable from gossip on one hand and testimony on the other. They are also similar in the implication of different degrees of moral elevation of the three participants. To the extent that morality is involved, the motivation to gossip, inform, or testify is related to the self concept and to seeking reinforcement or affirmation of status from another person. The relationship is called asymmetric because, unlike love and work, the affirmation is obtained

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at a cost to the third party -- the one gossiped about or informed on. These acts are therefore competitive and constitute a moral zero-sum game, suggesting an environment in which affirmation of one's worth is a scarce resource.

Gossiping, informing, and testimony occupy different positions on a dimension of formality or rationality -- the same dimension which extends from social control by custom to social control by law. However it appears that totalitarian societies may rationalize and institutionalize not only testimony and informing but also gossip as a form of control in primary groups. The extreme case is found in self-informing or confession, either to authority in hierarchical structures or to the primary group in collectivist structures.

Both gossip and testimony are oriented toward the assertion of solidarity of the communicator and the audience. No such bond is necessary for informing. One may inform to avoid or escape punishment, for material reward, or in order to assert the absence of solidarity with the actor. This suggests that asking children whether or not they would inform is not simply a measure of general orientation toward adults or peers, since while it may deny peer solidarity, it does not necessarily assert solidarity with adults nor the internalization of adult norms.

Informing may be either gratuitous or demanded by the audience. In the present case the informing response which was measured was in response to the demand by an adult for information. It followed what is perhaps a typical pattern in which the actor and the communicator are socially close in status or in behavior while the audience either occupies a functionally specialized authority position or has suffered some injury from the actor.

Procedure

This report concerns two sets of data. The first set is the informing response in a large number of questionnaire studies using Bronfenbrenner's response to pressure measure or "dilemma experiment" in over a dozen countries (Bronfenbrenner, 1967, 1970). The second set includes informing and a measure of family authority structure, also obtained by questionnaires given to children, from two of the studies conducted in Cologne, West Germany, and Tel Aviv, Israel These two studies were not selected because of the historical relation of Jews and Germans, nor because of hypothesized differences, but because they were the only two available with the same questionnaire measures of both family authority structure and informing.[3] So much for the hypothetico-deductive method. No hypotheses were in fact involved other than that family authority structure and informing ought to be related in ways which could shed light on both of them. The strategy was cross-cultural replication of antecedent-consequent relations in a 2 by 2 design -- culture by sex of child.

The dilemma experiment is part of a program of cross-cultural studies of child-rearing begun in the early 1960s by Urie Bronfenbrenner, Edward C. Devereux, and George Suci, at Cornell. At least 22 experiments have been conducted in 12 countries by the investigators and some eleven collaborating colleagues from other countries. The instrument contains 36 items divided into three forms of 12 items each. It is administered to classroom groups of children. The forms are administered in rotated and counterbalanced order under three different conditions of instruction, hence the title "experiment". Each form contains two items concerning informing. The conditions of instruction do not play a part in the results to be reported here.

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3. A third sample has since been gathered by Devereux in collaboration with Professor Aoi of Tokyo University from children in a rural area of Japan.

Each item presents the child with a hypothetical situation and asks him to rate on a six-point scale "What would you really do?" Dichotomous alternatives are given as cues, with three degrees of certainty for each alternative. In the case of informing the child is told that an adult has asked him in private for the names of his friends who have been involved in some mischief. Although the items were designed to be equivalent, they are not. For the combined Cologne and Tel Aviv samples there is a highly significant difference among item means. The order of means is very similar to that found in an American sample. From most to least informing, the situations presented to the subjects were:

1. Friends have looked at the answer sheet for a test to be taken in school. The teacher asks for the names of those who saw the answers.

2. Friends have broken a window while playing ball. The school principal asks for the names of those involved.

3. Friends have hidden a rubber snake in the desk drawer of a disliked teacher. The teacher asks for the names of those who did it.

4. Friends have eaten fruit from a tree while out walking. A man, otherwise unidentified, asks for the names of those who had trespassed and eaten the fruit.

5. Friends who are over twelve years of age have gotten into a movie theater for half fare by saying that they were less than twelve. The ticket-taker asks the respondent to tell which of the other kids are over twelve.

6. Friends have done some pranks on a night when children are expected to be at large doing mischief (Halloween in the United States, Fasching in Germany, Purim in Israel, and equivalent occasions in other countries.) A woman, otherwise unidentified, who was the victim of a prank asks for the names of the other kids.

Thus in general informing was more likely in the situations involving specific school authorities and less likely in situations involving injury to unidentified persons.

There was also a significant item by culture interaction, with the German children relatively more likely to inform in the case of the broken window than were the Israelis. This obviously bears on the question of equivalent stimuli in cross-national research. In the present instance the focus is on the use of different national samples as replications of intra-cultural antecedent-consequent relationships. Validity is less threatened here by lack of equivalence than if the intent were strictly cross-national comparison of responses on a single dimension, but the threat is not entirely absent. What can be said of the informing score as the sum of the six items is that the internal consistency coefficients (K-R20) are adequate: .72, .80, .80, and .81, for Cologne boys and girls and Tel Aviv boys and girls, respectively.

The conception of family authority structure follows Herbst (1957), Blood and Wolfe (1960), Vermeulen (1970), and earlier work by Bronfenbrenner and Devereux (1961), in conceiving of two dimensions crossed in a double trichotomy. The first dimension, sex-role direction (hereafter SR) runs from father through both parents to mother. The second dimension is the degree of differentiation (hereafter DD) regardless of which parent makes the decisions, divided into low, medium and high. In the resulting nine-cell table two of the classes are null -- there can be no families of low differentiation in which either father or mother make all the decisions. The crossing of two scales, SR and DD, produces a triangular distribution of possible positions as shown in Figure 1. The apexes are labeled:

Syncratic families: both parents participate equally in all decisions,
Patriarchal: father makes all decisions, and
Matriarchal: mother makes all decisions.

Along the base between Patriarchal and Matriarchal falls the Autonomous family in which some decisions are made exclusively by one parent and other decisions by the other parent. Families with a moderate degree of differentiation are divided into Patricentric, Mixed, and Matricentric, according to the relative dominance of father or mother on the SR dimension.

(Insert Figure 1)

The questionnaire consisted of seven items, three of decisions concerning the whole family and four decisions on child-rearing issues affecting the child. The original responses were on the SR dimension with a five-point scale (Figure 1). The DD score was obtained by folding over the SR scale to give a three-point score. The final SR and DD scores were the sums of the seven items. Internal consistency coefficients (K-R20) for the seven-item sums ranged from .61 for the SR score of Cologne girls to .83 for the DD score of Tel Aviv boys. Correlations between SR and DD scores were -.10, -.35, .13, and .45 for Cologne boys and girls and Tel Aviv boys and girls, respectively.

Both Cologne and Tel Aviv samples are children in their sixth year of school. The Cologne sample, taken in 1968, initially consisted of 138 boys from two Gymnasia and three Volkschulen and 73 girls from one Gymnasium and two Volkschulen. Attrition from incomplete data reduced these to 127 boys and 66 girls. The Tel Aviv sample is the product of a joint research of Cornell, the University of Tel Aviv, and the Institute for Research on Kibbutz Education at Oranim. It was gathered in 1970 in three schools, each with three sixth-year classrooms, in largely middle-class and Western-origin neighborhoods of Tel Aviv. Initially there were 144 boys and 138 girls. Incomplete data, usually due to broken families, reduced this to

121 boys and 119 girls.

Results

Before considering the results of the intra-national analysis of family authority structure and informing there are some things to be learned from the overall results of the 22 dilemma experiments shown in Table 1. First and most apparent is a rural-urban gradient. Wherever two or more experiments were carried out within a society, the intent to inform appears stronger in rural and weaker in urban children. This difference was significant in Hungary, Japan, Canada, and Israel. From Canadian and United States experiments it also appears that ethnic or religious minorities may be more disposed to inform than members of the modal culture.

Second, girls were more disposed to inform than boys. This difference was significant in eleven of the experiments. Only among rural Japanese and rural West Germans do boys have higher means than girls.

(Insert Table 1)

So far, all is consistent with the idea that the intent to inform is a function of the acceptance of authority. Some additional facts, not tabled, are: (1) In 12 of the experiments tests were made of the significance of variation among classrooms or schools. Classrooms within schools differed in five experiments and schools in three. This suggests that the disposition to inform, like other value and attitude responses, may vary according to the norms of immediate primary groups or of ecological units such as neighborhoods. (2) For nine experiments where the ages of the children were obtained, there was a rank correlation of -.35 between mean informing and mean age of the samples. We have also found from the American large city sample that there is a sharp linear decline in the dilemma conformity score,

or a change from adult-orientation to peer-orientation, from 5th to 8th grade within the same schools. Thus even though these experiments, with the exception of the Hungarian 8th graders, were conducted with children in the sixth year of school, it is prudent to consider that some of the apparent cultural variations shown are confounded with minor differences in the ages of the samples, which ranged from 13.05 years for the Swiss and 12.29 for the Netherlands to 11.54 for the U.S.A. small city sample.

It is unfortunate that the Cologne and Tel Aviv samples were among the least disposed to inform. They also have among the smallest sex differences in informing. The relation of informing to family authority structure described below in these two samples may not be representative of the full range of levels of informing.

These two samples did differ significantly with the German children more disposed to inform. Tests of culture and sex differences in the family authority structure variables were also made. As expected, girls attributed more decisional authority to their mothers, and boys to their fathers ($p$ less than .05), on the SR score. Neither culture nor the sex by culture interaction was significant. On the DD scale boys described a more highly differentiated family than girls ($p$ less than .001), and the Cologne children a more differentiated structure than the Tel Aviv children ($p$ less than .001). The interaction was not significant. The joint mean of the two scales places the Tel Aviv girls within the Syncratic type and the other three samples within the Mixed cell.

The Syncratic family was most frequent in all four samples. This may be in part of function of age. Combining the findings of Hess and Torney (1962) with those of Bowerman and Elder (1964) suggests that the perception

of an equalitarian family reaches a maximum between the ages of 11 and 14, while the perception of father dominance is greater at both earlier and later ages.

The analysis of the relation of family authority structure and informing was carried out in four steps. First, multiple regressions of informing on the linear and quadratic components of the SR and DD scales were computed in the four samples -- boys and girls from Cologne and Tel Aviv -- separately, with age controlled. Second, the resulting equations were cross-validated by intercorrelating them in all four samples. Third, controlling for both culture and age the multiple regressions were computed for all boys and for all girls. Fourth, the equations from the third step were used to plot the surface of informing z-scores on the triangular plane of family authority structure separately for boys and for girls. The use of both linear and quadratic components made it possible to locate at least one maximum and minimum informing value anywhere on the surface.

The multiple regression results for each sample are shown in Table 2, columns 1, 2, 4, and 5. It is apparent that family authority structure is more strongly related to the disposition to inform among girls than among boys. It also appears from the patterns of signs of the beta coefficients that the relation of informing to the sex-role dimension is similar for both sexes within a culture, but different for the two cultures. Conversely, the relation of informing to the degree of differentiation is similar across cultures for the same sex, but different for the two sexes within culture.

(Insert Table 2)

These patterns were born out when the equations were cross-validated. Table 3,A. shows the average intercorrelations of the equations for $SR + SR^2$, $DD + DD^2$, and the full equation of four components, calculated for the same sex

across cultures, the same culture across sexes, and across both sex and culture. The equations for the sex-role dimension which predict informing (controlling for age and degree of differentiation) are positively correlated within cultures and negatively correlated across cultures. The equations for the degree of differentiation which predict informing (controlling for age and sex-role direction) are positively correlated within sex and negatively correlated across sex. Finally, the full equations tend to be positively correlated in the same sex across culture, to have no correlation in the other sex from the same culture, and to be negatively correlated across both sex and culture. Among girls the full equation from one culture successfully predicts informing in the other culture, but this is not the case for boys (Table 3, part B.).

(Insert Table 3)

These results led to the third step in which multiple regressions of informing on family authority structure were computed for all boys and all girls separately, partialling out the effects of culture and age. These equations appear in Table 2, columns 3 and 6, and the plotting of informing over the family authority plane in Figures 2 and 3. The multiple correlations, after control for culture and age, were .20* and .36***, for boys and girls, respectively.

The standardized regression coefficients and the predicted values of a standardized informing score on the plots reveal that for girls there is a negative linear relation with sex-role direction, informing being more likely in families dominated by the father than by the mother. Among boys there is no relation of informing to the sex-role direction of authority. The relation of informing to the degree of differentiation in decision-making is curvilinear in both sexes but opposite in shape. Girls from families

with either very much or very little differentiation are more likely to inform, but it is more likely in boys from families with an intermediate level of differentiation and less likely in either syncratic or highly differentiated families.

The pattern for boys is similar to the finding that teacher-rated responsibility of high school boys is highest among those from patricentric and matricentric families and lower in boys from patriarchal, matriarchal, and equalitarian families (Bronfenbrenner, 1961). This implies that the intent to inform belongs to the class of dispositions producing behavior considered as "responsible" by teachers.

The pattern for girls is neither consistent with nor simply a reversal of that for boys. Girls who resist the demand to inform come from matricentric families, and those most likely to inform from patriarchal families.

Discussion

Pursuing the ideas that the informing demand occurs in a triadic relationship and that the essential motivation concerns reinforcement of one's moral worth, recalls Simmel's distinction between the mediating and the third force roles which members of triads may assume. As mediator, the third member communicates about the other two to each of them and is basically concerned with establishing or preserving unity between and with them. While it is certainly possible to imagine situations in which children would be motivated to mediate between their peer group and adults, the informing demand as it was presented to them is clearly not such a situation. As third force, the third member "makes his own indirect or direct gain by turning toward one of the two conflicting parties" (Simmel, 1950, p.155). Casting the results in a motivational framework leads to assertions such as:

boys whose self esteem is controlled more by adult than by peer reinforcement are likely to come from families with a moderate degree of differentiation between parents in decision making; and girls whose self esteem is controlled more by peer than by parental reinforcement are likely to come from matricentric families.

This formulation omits several important aspects of informing. First, and especially for boys, resistance to informing in the equalitarian or patriarchal families may be an adult-approved response. Such children would experience an increase in esteem from adults for resisting authority and siding with their peers. Second, it is not possible at this point to distinguish between the effects of positive and negative reinforcement. Third and related, informing may express the assertion of the absence of solidarity with the peer group. Thus it is possible that girls from patriarchal families or boys from moderately differentiated families may be motivated to inform "at the expense of" or in retaliation to their peers from whom they have experienced negative reinforcement. It is this possibility which distinguishes informing from more general conformity.

That there is empirical regularity in the relation of the disposition to inform to culture, sub-culture, age, sex, and family authority structure is clear. That the results raise at least as many questions as they answer also seems clear. Probably the most important of these concerns the nature of the interaction patterns between the child and his parents and peers which will influence the child to accept or reject the demand to inform. The relation of informing to the child's history of reinforcement from parents and peers is likely to be complicated by different normative expectations placed on informing as an acceptable or unacceptable behavior.

## References

Blood, R. O., Jr. and Wolfe, D. M. Husbands and Wives. Glencoe: The Free Press, 1960.

Bowerman, C. E. and Elder, G. H., Jr. "Variations in adolescent perception of family power structure", American Sociological Review, 29, 1964, 551-567.

Bronfenbrenner, U. and Devereux, E. C., Jr. "Family authority structure and adolescent behavior", Acta Psychologica, 19, 1961, 414-418.

Bronfenbrenner, U. "Toward a theoretical model for the analysis of parent-child relationships in a social context". In J. D. Glidewell (Ed.), Parental Attitudes and Child Behavior, Springfield, Illinois: Charles C. Thomas, 1961. Pp. 90-109.

Bronfenbrenner, U. "Response to pressure from peers versus adults among Soviet and American school children", International Journal of Psychology, 2, 1967, 199-207.

Bronfenbrenner, U. "Reaction to social pressure from adults versus peers among Soviet day school and boarding school pupils in the perspective of an American sample", Journal of Personality and Social Psychology, 15, 1970, 179-189.

Herbst, P. G. "Conceptual frameworks for studying the family". In O. A. Oeser and S. B. Hammond (Eds.), Social Structure and Personality in a City. London: Routledge & Kegan Paul, 1957. 126-137.

Hess, R. D. and Torney, J. V. "Religion, age, and sex in children's perception of family authority", Child Development, 33, 1962, 781-789.

Simmel, G. The Sociology of Georg Simmel. Glencoe: The Free Press, 1950.

Vermeulen, C. J. J. "Families in urban Greece", unpublished PhD dissertation, Cornell University, 1970.

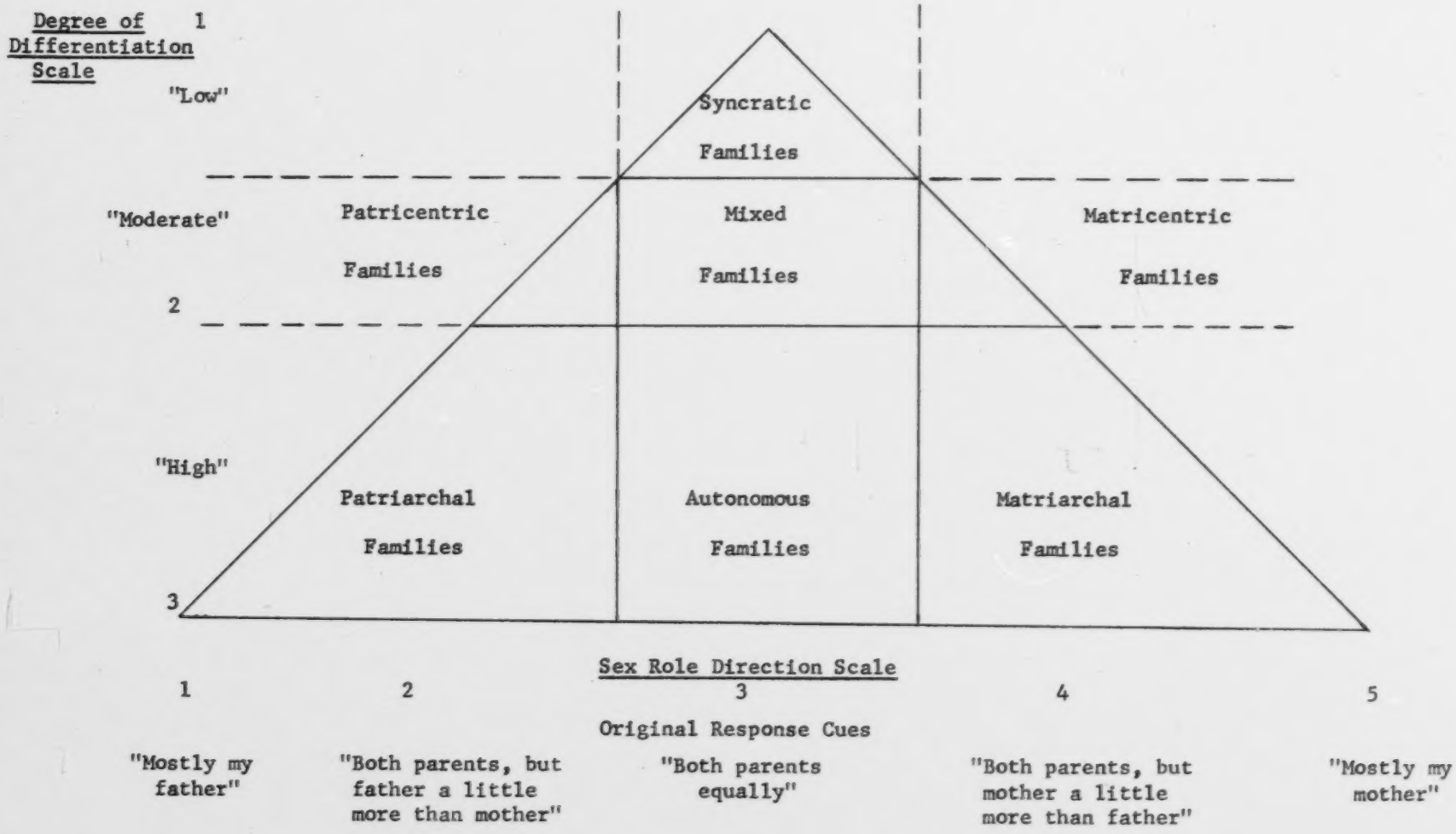


Figure 1. Triangular joint distribution of Sex-Role Direction and Degree of Differentiation Scales with Family Authority Types based on arbitrary cutting points.

Table 1

Mean Informing Scores by Culture and Sex

Unweighted Means[1]

| Experimental Samples | Both Sexes | Boys | Girls | Significance of Sex Difference |
|---|---|---|---|---|
| Hungary: rural, 8th grade | 1.85 | 1.59 | 2.11 | .10 |
| Hungary: urban | 1.65 | 1.13 | 2.16 | n.s. |
| Japan: rural | 1.34 | 1.41 | 1.26 | n.s. |
| Canada: small town | 1.22 | 0.42 | 2.02 | .001 |
| Japan: large city | 0.64 | 0.40 | 0.88 | .05 |
| Canada: German origin | 0.51 | -0.08 | 1.09 | .001 |
| Canada: Ukrainian origin | 0.08 | -0.43 | 0.59 | .01 |
| Iceland: | -0.13 | -0.50 | 0.25 | n.s. |
| Korea: urban | -0.13 | -0.18 | -0.09 | not available |
| Canada: large city | -0.17 | -0.23 | -0.10 | n.s. |
| U.S.A.: small city (public) | -0.20 | -0.49 | 0.10 | n.s. |
| U.S.A.: large city (Catholic) | -0.43 | -0.74 | -0.12 | n.s. |
| Canada: large city | -0.76 | -1.13 | -0.39 | .10 |
| West German: rural | -0.79 | -0.60 | -0.98 | not available |
| U.S.A.: large city (public) | -1.22 | -2.14 | -0.29 | .05 |
| Scotland: urban | -1.59 | -1.97 | -1.20 | .10 |
| Poland: urban | -1.62 | -2.40 | -0.83 | .001 |
| Swiss: urban | -1.80 | -2.04 | -1.55 | n.s. |
| Hungary: urban, 8th grade | -1.82 | -1.80 | -1.85 | n.s. |
| Netherlands: urban | -1.88 | -2.46 | -1.29 | .05 |
| West German: Cologne | -2.41 | -2.43 | -2.38 | n.s. |
| Israel: 31 kibbutzim | -2.41 | -2.57 | -2.25 | .05 |
| Israel: Tel Aviv | -3.58 | -3.60 | -3.56 | n.s. |

1. Possible score range is +5 to -5. Positive values indicate informing, negative values indicate refusal to inform.

Table 2

Multiple Regressions of Informing on
Family Authority Structure,
Controlling for Age and Culture

| | Boys | | | Girls | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Cologne | Tel Aviv | Pooled | Cologne | Tel Aviv | Pooled |
| $R_2$ | .12 | .28 | .20 | .43 | .40 | .36 |
| $R^2$ | .014 | .079 | .038 | .186 | .156 | .126 |
| F | 0.42 | 2.45 | 2.41 | 3.44 | 5.24 | 6.44 |
| df. | 4/121 | 4/117 | 4/241 | 4/60 | 4/113 | 4/178 |
| P. | n.s. | * | * | * | *** | *** |
| | | | Component Beta Coefficients | | | |
| $SR_2$ | -.458 n.s. | 1.328 n.s. | .027 n.s. | -1.089 n.s. | 1.423 n.s. | -.197** |
| $SR^2$ | .437 n.s. | -1.376 n.s. | -.079 n.s. | .789 n.s. | -1.769 # | .006 n.s. |
| $DD_2$ | .586 n.s. | .886 n.s. | .565** | -.679 n.s. | -2.001*** | -.411 # |
| $DD^2$ | -.679 n.s. | -.612 n.s. | -.522* | .788 n.s. | 2.444*** | .639** |

Symbol P

\# = .10
* = .05
** = .01
*** = .001

Table 3

Cross-Validation of Family Authority Structure Regression Equations

A. Average Correlations among Components across Samples (a)

| | Same Sex in other Culture | Same Culture for opposite Sex | Opposite Sex in other Culture |
|---|---|---|---|
| $SR + SR^2$ | -.92 | .85 | -.88 |
| $DD + DD^2$ | .47 | -.68 | -.57 |
| Full Equation | .43 | -.05 | -.62 |

(a) calculated by average weighted (N-3) Z' transformation

B. Correlations of Full Equation with Informing, Controlling for Age

Tested in:

| | Boys | | Girls | |
|---|---|---|---|---|
| Equation from: | Cologne | Tel Aviv | Cologne | Tel Aviv |
| Cologne Boys | .12 n.s | .13 n.s. | -.05 n.s. | -.26** |
| Tel Aviv Boys | -.02 n.s. | .28* | -.15 n.s. | .04 n.s. |
| Cologne Girls | -.01 n.s. | -.14 n.s. | .43* | .28** |
| Tel Aviv Girls | -.09 n.s. | -.03 n.s. | .27* | .40*** |

| Symbol | P |
|---|---|
| * | .05 |
| ** | .01 |
| *** | .001 |

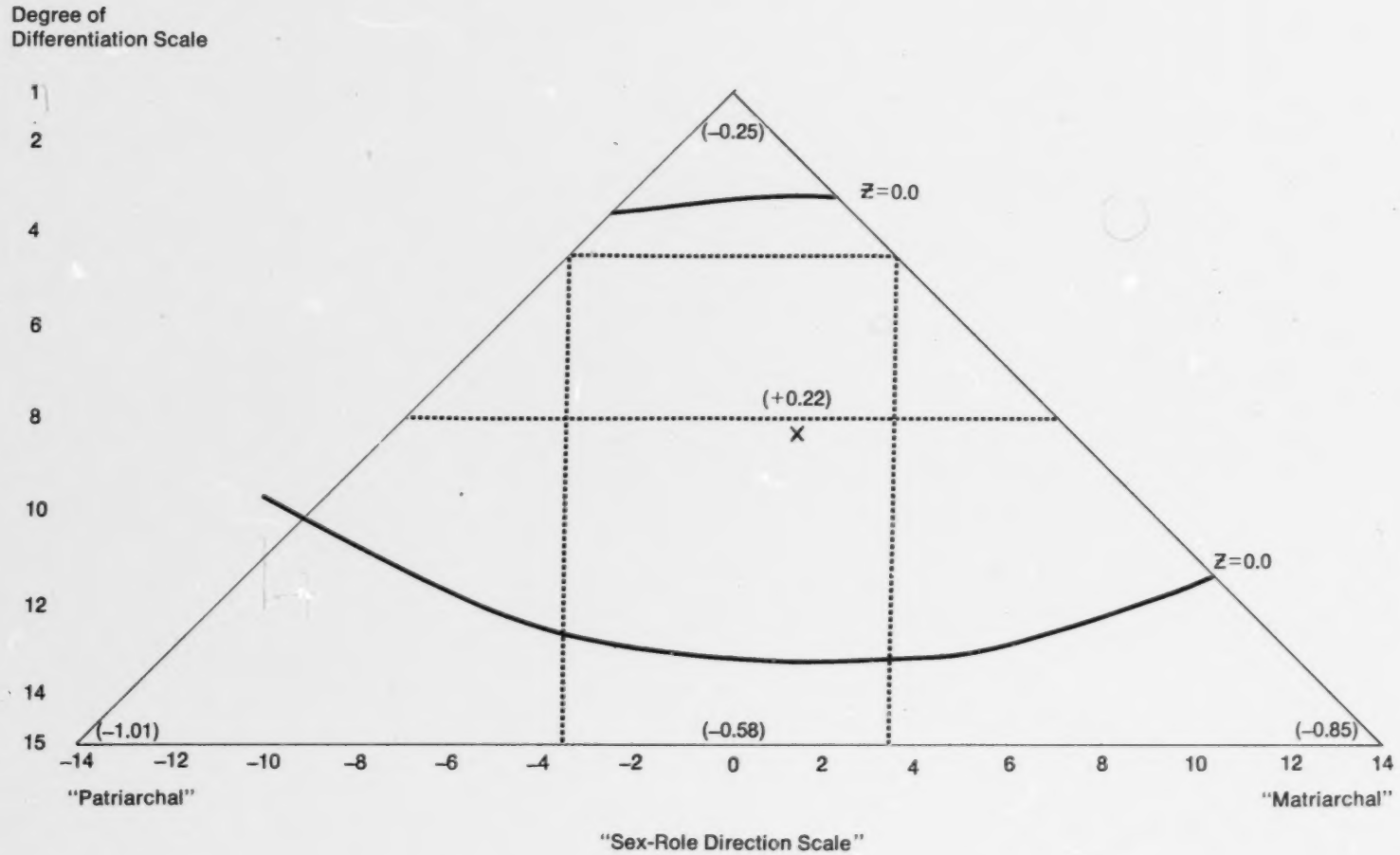


Figure 2

Plot of Informing Standard Score for Boys on Family Authority Structure Plane, Controlling for Culture and Age

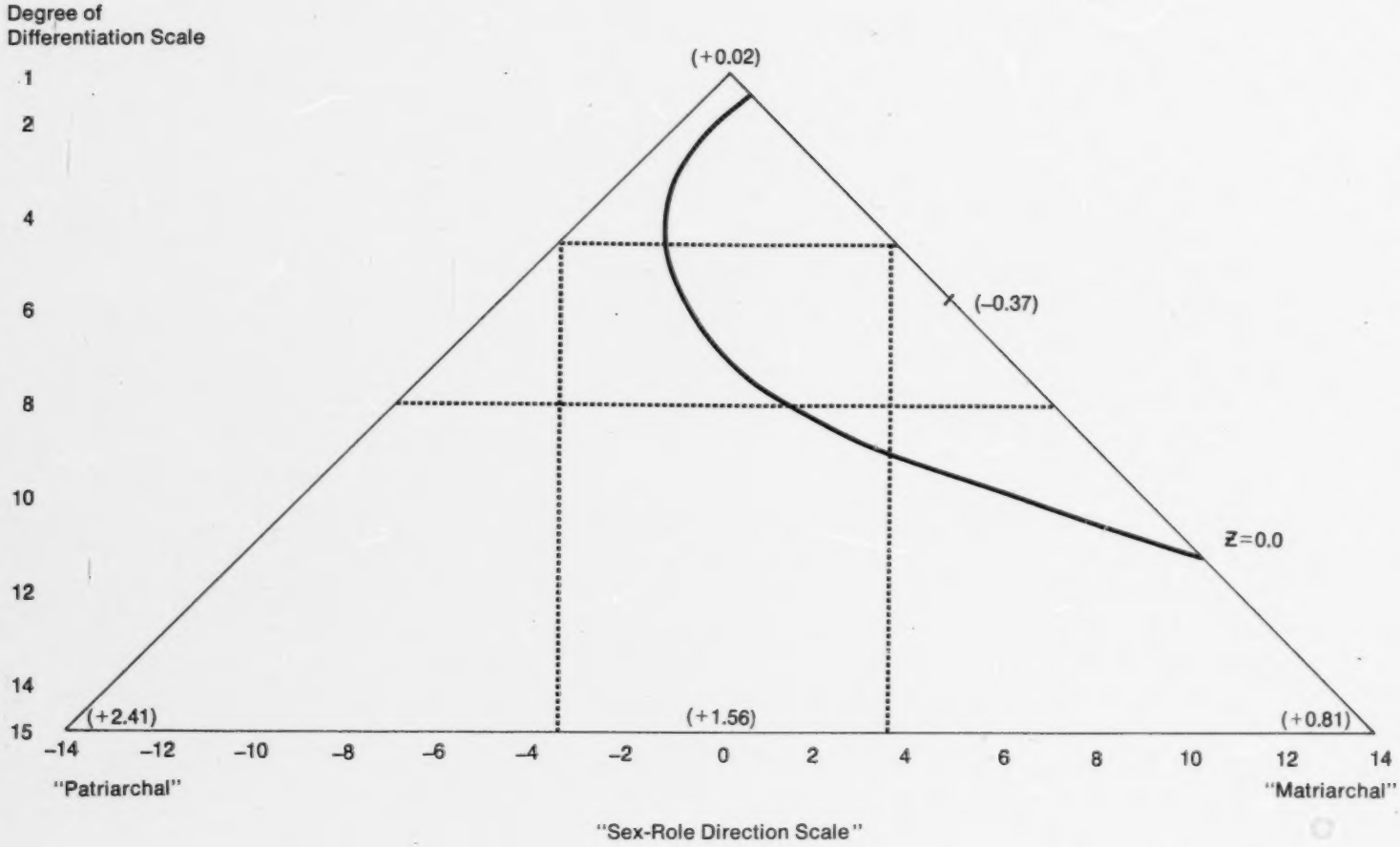


Figure 3

Plot of Informing Standard Score for Girls on Family Authority Structure Plane,
Controlling for Culture and Age